

ANNOTATED CHECKLIST OF THE VASCULAR FLORA OF THE  
BEECH CREEK UNIT OF THE BIG THICKET NATIONAL PRESERVE,  
TYLER COUNTY, TEXAS

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ABSTRACT

An annotated, vouchered checklist is provided for the vascular plant taxa of the 2,059 hectare Beech Creek Unit, Big Thicket National Preserve, Tyler County, southeastern Texas. Documented in the unit are 470 taxa of which 52 taxa (11%) are exotics.

RESUMEN

Se aporta un catálogo con anotaciones y testigos de los taxa de plantas vasculares de las 2,059 hectáreas de la unidad Beech Creek, Big Thicket National Preserve, Tyler County, sureste de Texas. Los taxa documentados en la unidad son 470 de los que 52 (11%) son exóticos.

INTRODUCTION

This manuscript is the 5th part of an intended inventory, based on voucher specimens, of the vascular flora of the Big Thicket National Preserve, southeastern Texas. In 4 previous papers, we provided an annotated checklist of the Hickory Creek, Turkey Creek, Big Sandy Creek, and Lance Rosier units (MacRoberts et al. 2002; Brown et al. 2005, 2006a, 2006b). In this paper, we provide an annotated checklist of the Beech Creek Unit.

SITE AND METHODS

The Big Thicket is located mostly within the longleaf pine region of the West Gulf Coastal Plain in southeastern Texas (Ajilvsgi 1979; Harcombe & Marks 1979; Watson 1979; Marks & Harcombe 1981; Harcombe et al. 1993; Diggs et al. 2006 and references therein). The Big Thicket National Preserve consists of 12 units scattered over 7 Texas counties. The units range from 222 to 10,100 hectares and total about 34,000 hectares (Peacock 1994). The Beech Creek Unit consists of 2,059 hectares and is located in western Tyler County (Fig. 1). It is relatively flat with poor drainage over most of the area. Elevation ranges from about 43 meters to 62 meters. Little Beech Creek and Beech Creek run through the unit. The Beech Creek Unit was chosen for inclusion in the Big Thicket National Preserve because of its extensive stands of beech forest (Ajilvsgi 1979; Harcombe & Marks 1979; Watson 1979; Marks & Harcombe 1981). It is dominated by lower slope hardwood-pine forest (mesic lower slopes and terraces), with lesser amounts of baygall, mid-slope oak-pine forest, floodplain hardwood-pine forest (mesic stream bottoms), and floodplain hardwood forest (seasonally flooded river floodplain) (Harcombe & Marks 1979; Marks & Harcombe 1981; Van Kley 2006). A map of community types can be found in Harcombe and Marks (1979). Fire suppression over the past 30 years has resulted in extensive midstory development and thus reduction of herbaceous vegetation that



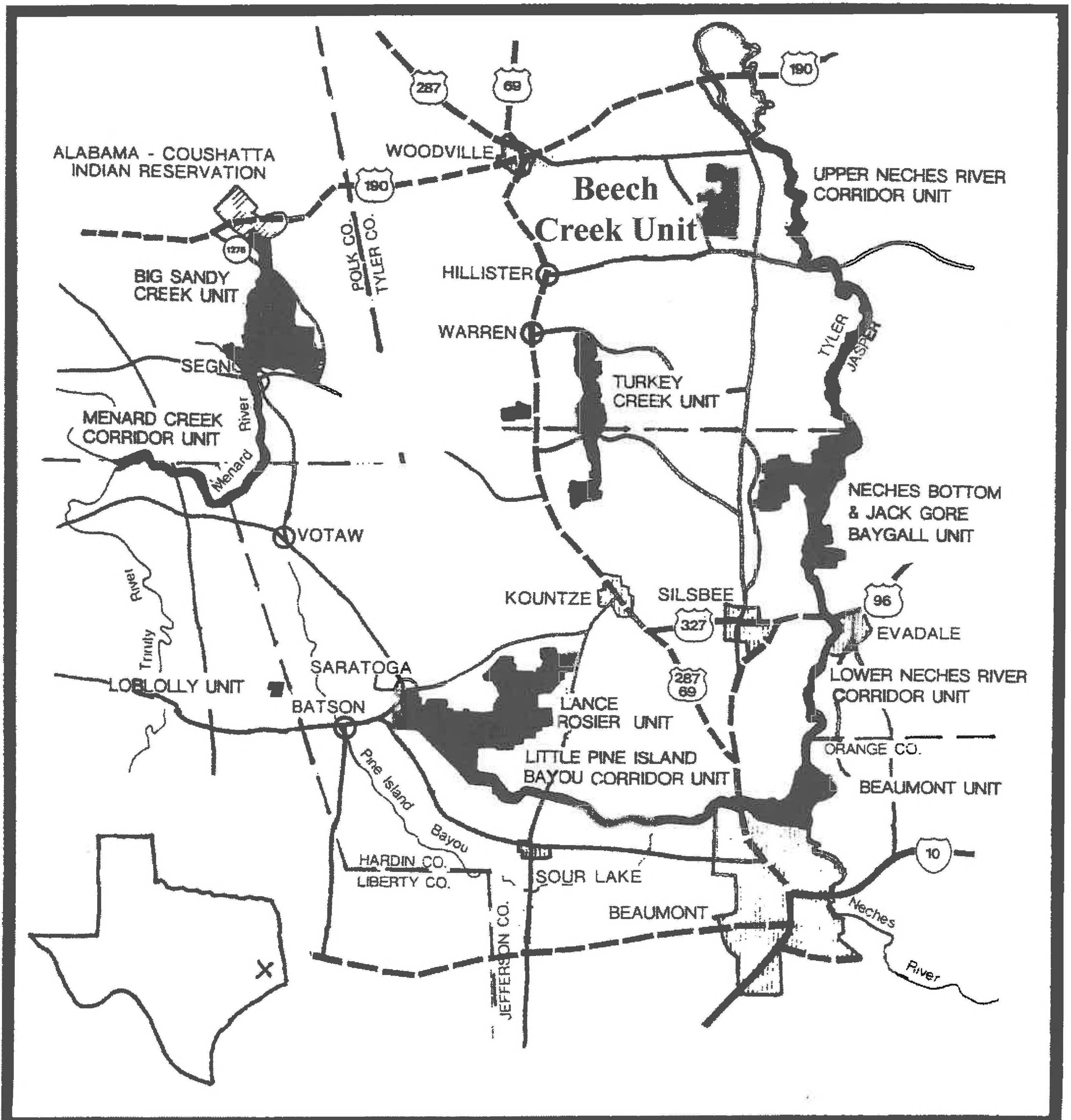


Fig. 1. Location of the Beech Creek Unit, Big Thicket National Preserve, Texas.

is adapted to frequent fires. Hurricane Rita, a category 3 hurricane, passed over the unit on 24 September 2005 damaging and toppling thousands of trees. It will probably take decades for this litter to decompose. Details about soils, topography, and climate can be found in Deshotels (1978); Watson (1979, 1982, 2006); Harcombe and Marks (1979); Marks and Harcombe (1981); and Diggs et al. (2006).

Like most units of the Big Thicket National Preserve, the Beech Creek Unit has not been the subject of a detailed floristic inventory.

Larry Brown collected 290 specimens during 9 field days beginning 9 November 2006 and ending 17 October 2007. The MacRobertses collected 154 specimens during 4 field days in 2004 and 1 day in 2007. Suzanne Walker collected 101 specimens during 2 days in 2004 and 1 additional day in 2007. Sandi Elsik and Warren Pruess together gathered 82 specimens during 2005. Geraldine Watson collected 25 specimens



over several years in the late 1970s and early 1980s. Warren Pruess collected another 11 specimens over a 2 year period. Other collectors totaled 12 specimens. We conducted a search of the Texas A&M University (TAMU) herbarium consortium data base (<http://www.csd.tamu.edu/FLORA/tracy/main/html/>) for additional specimens but found no additional taxa not reported here.

Because our purpose was to produce a list of taxa known to occur on the Beech Creek Unit, a vouchered specimen was considered to be the only evidence acceptable for inclusion in the list. In all, 675 herbarium specimens form the data for this report. All specimens have been annotated by Larry Brown.

In most cases, nomenclature follows Jones et al. (1997), Kartesz (1999), Turner et al. (2003), and Diggs et al. (2006). In cases of multiple collections, no more than 4 are listed for each taxon.

## RESULTS

The following is an annotated list of the Beech Creek Unit taxa. Abbreviations used are given below.

**GW** = Geraldine Watson. Her collections are at TAES.

**JL** = Joe Ligio. His collections are at TAES.

**LB** = Larry Brown. His specimens are at TAES.

**MM** = Barbara and Michael MacRoberts. Their specimens are at TAES.

**PH** = Paul Harcombe. His collections are at TAES.

**PM** = Phil Malmassey. His collections are at TAES.

**RH** = Roland Harper (grandson of LB).

**SEWP** = Sandra Elsik and Warren Pruess. Their specimens are at TAES.

**SH** = Shawn Harper (grandson of LB).

**SW** = Suzanne Walker. Her specimens are at TAES.

**WP** = Warren Pruess. His specimens are at TAES.

**WRC** = Bill Carr. His collections are at TEX/LL.

\* = exotic

+ = see note at end of list.

### Acanthaceae

*Justicia ovata* (Walter) Lindau var. *lanceolata* (Chapm.) R.W. Long, SW 67, 46

*Ruellia caroliniensis* (J.F. Gmel.) Steud., SEWPLB 488; LBSH 32151

*Ruellia humilis* Nutt., MM 7150

### Aceraceae

*Acer rubrum* L., MM 7078

### Agavaceae

\**Yucca aloifolia* L., LB 31939; SEWP 272

*Yucca louisianensis* Trel., MM 7141

### Anacardiaceae

*Rhus copallinum* L., SEWP 249

*Toxicodendron radicans* (L.) Kuntze, SEWP 337; LB 32783

*Toxicodendron vernix* (L.) Kuntze, SEWP 341

### Annonaceae

*Asimina parviflora* (Michx.) Dunal, SW 03; LB 31996, 32178; MM 7097

### Apiaceae

*Centella erecta* (L.f.) Fernald, SW 03

*Chaerophyllum tainturieri* Hook. var. *tainturieri*, WP 113

*Cicuta maculata* L., SEWP 414

\**Cyclosporum leptophyllum* (Pers.) Sprague ex Britton & P. Wilson, SW 58

*Eryngium prostratum* Nutt. ex DC., SW 68

*Hydrocotyle verticillata* Thunb., SEWP 262; LB 32783

*Ptilimnium capillaceum* (Michx.) Raf., LB 31994; LBSH 32122

*Sanicula canadensis* L., SW 71

*Sanicula smallii* E.P. Bicknell, WP 111

### Apocynaceae

*Trachelospermum difforme* (Walter) A. Gray, LB 31998

### Aquifoliaceae

*Ilex ambigua* (Michx.) Torr., PH 001

*Ilex coriacea* (Pursh) Chapm., SW 012

*Ilex longipes* Chapm. ex Trel., PH 002

*Ilex opaca* Aiton, MM 7056

*Ilex vomitoria* Sol. in Aiton, MM 7058

### Araceae

*Arisaema triphyllum* (L.) Schott, SW 10, 31

### Araliaceae

*Aralia spinosa* L., SEWP 245

### Arecaceae

*Sabal minor* (Jacq.) Pers., MM 7131

### Aristolochiaceae

*Aristolochia serpentaria* L., SW 05; GW 2261

### Asclepiadaceae

*Asclepias perennis* Walter, SEWP 230

*Asclepias variegata* L., LBRH 32061

### Aspleniaceae

*Asplenium platyneuron* (L.) Britton, Sterns, & Poggenb., WP 116

### Asteraceae

*Ambrosia artemisiifolia* L., MM 7198

*Ambrosia trifida* L., SEWP 265

*Baccharis halimifolia* L., LBRH 32071; SW 105

*Bidens aristosa* (Michx.) Britton, LB 33034

*Bidens bipinnata* L., SEWP 252; LB 33030

*Bidens frondosa* L., LB 33003

*Boltonia diffusa* Ell., MM 7199

+*Bradburia pilosa* (Nutt.) Semple, SEWPLB 491, 501; MM 7197

*Cirsium horridulum* Michx., SEWP 240; SW 111

*Conoclinium coelestinum* (L.) DC., SW 44b; LB 33039

*Conyza bonariensis* (L.) Cronquist, LB 32466

*Conyza canadensis* (L.) Cronquist, SEWP 335; LBJL 32616a

*Coreopsis lanceolata* L., SW 063

*Coreopsis tinctoria* Nutt., SEWP 253



- Elephantopus carolinianus* Raeusch., SW 74; LBJL 32959  
*Elephantopus nudatus* A. Gray, LB 33002  
*Elephantopus tomentosus* L., LB 28598a, 28353; SEWP 327; LBJL 32616  
*Erechtites hieraciifolia* (L.) Raf. ex DC., SEWP 342  
*Erigeron strigosus* Muhl. ex Willd., MM 7139; LBRH 32060  
*Eupatorium capillifolium* (Small) Lam., PM 03; LB 32457  
*Eupatorium lancifolium* (Torr. & A. Gray) Small, LBSEWP 31899; MM 7187  
*Eupatorium mohrii* Greene, SEWPLB 496  
*Eupatorium perfoliatum* L., SW 83; MM 7147  
*Eupatorium x pinnatifidum* Elliott, LB 33004  
*Eupatorium rotundifolium* L., SW 39a; LB 33039  
*Eupatorium semiserratum* DC., LB 32491  
*Eupatorium serotinum* Michx., SW 43; PM 02; LB 33016  
*Euthamia leptcephala* (Torr. & A. Gray) Greene ex Porter & Britton, LBSEWP 31894  
 \**Facelis retusa* (Lam.) Sch. Bip., LBRH 32048; MM 7683  
*Gaillardia pulchella* Foug. var. *pulchella*, SEWP 255  
*Gamochaeta coarctata* (Willd.) Kerguelen, MM 7106  
*Gamochaeta purpurea* (L.) Cabrera, SW 061  
*Helenium amarum* (Raf.) H. Rock var. *amarum*, MM 7135  
*Helianthus angustifolium* L., SEWP 403b; LB 33023  
*Hieracium gronovii* L., LB 32494  
*Hymenopappus artemisiifolius* DC. var. *artemisiifolius*, MM 7148  
 \**Hypochaeris microcephala* (Sch. Bip.) Cabrera var. *albiflora* (Kuntze) Cabrera, LBRH 32075; MM 7661  
*Krigia cespitosa* (Raf.) Chambers, LB 32001; LBRH 32051  
*Krigia virginica* (L.) Willd., MM 7678  
*Mikania scandens* (L.) Willd., SW 33, 86  
*Lactuca canadensis* L., LB 32166  
*Pluchea camphorata* (L.) DC., MM 7211, 7212; LB 32804  
*Pluchea foetida* (L.) DC., MM 7236; SW 92  
*Pyrrhopappus carolinianus* (Nutt.) Wooten & Standl., LB 32462  
*Pyrrhopappus pauciflorus* (D. Don) DC., WP 119; SW 125  
*Rudbeckia hirta* L., MM 7112; LBRH 32074  
*Solidago altissima* L., SW 100; LB 33015  
*Solidago ludoviciana* (A. Gray) Small, SEWPLB 502  
*Solidago rugosa* Mill. var. *aspera* (Aiton) Fernald, LBSEWP 31887; SEWP 331; LB 33024  
 \**Sonchus asper* (L.) Hill, LB 32006; SEWP 544; SW 113  
*Symphyotrichum dumosum* (L.) G.L. Nesom, MM 7206  
*Symphyotrichum lateriflorum* (L.) A. & D. Love, WP 120; MM 7668; GW 2248; SEWPLB 481  
*Symphyotrichum racemosum* (Elliott) G.L. Nesom, LBSEWP 31886; LB 33001

**Berberidaceae**

*Podophyllum peltatum* L., MM 7109

**Betulaceae**

- Alnus serrulata* (Aiton) Willd., GW 2250  
*Betula nigra* L., SEWP 360  
*Carpinus caroliniana* Walter, MM 7083  
*Ostrya virginiana* (Mill.) K. Koch, MM 7126

**Bignoniaceae**

- Bignonia capreolata* L., MM 7065  
*Campsis radicans* (L.) Seem. ex Bureau, SW 02, 49

**Blechnaceae**

- Woodwardia areolata* (L.) T. Moore, SW 47; MM 7659  
*Woodwardia virginica* (L.) Small, MM 7238; LB 33036

**Brassicaceae**

- \**Cardamine hirsuta* L., LB 31943  
*Cardamine parviflora* L. var. *arenicola* (Britt.) Schultz, LB 31942

**Bromeliaceae**

- Tillandsia usneoides* (L.) L., SEWP 395

**Buddlejaceae**

- Polypremum procumbens* L., PM 04; LBJL 32601

**Burmanniaceae**

- Apteria aphylla* Barnhart., MM 7224; SW 88; LB 33009  
*Burmannia biflora* L., SEWP 422

**Callitrichaceae**

- Callitriche peploides* Nutt., LB 32017

**Campanulaceae**

- Lobelia cardinalis* L., SW 84; MM 7209  
*Lobelia appendiculata* A. DC., MM 7673; LBSH 32149  
*Lobelia puberula* Michx., SW 34; GW 2249, 2336; LB 31934  
*Triodanis biflora* (Ruiz & Pavon) Greene, LB 32009; LBRH 32059; MM 7674  
*Triodanis perfoliata* (L.) Nieuwl. LBRH 32059  
 \**Wahlenbergia marginata* (Thunb.) A. DC., WP 121; LB 32487; SW 110

**Caprifoliaceae**

- \**Lonicera japonica* Thunb., MM 7162  
*Sambucus nigra* L. subsp. *canadensis* (L.) R. Bolli, SW 60, BT050  
*Viburnum acerifolium* L., SW 57  
*Viburnum dentatum* L., SW 48  
*Viburnum nudum* L. var. *nudum*, GW 2260b; LB 32170

**Celastraceae**

- Euonymus americanus* L., SEWP 418

**Cistaceae**

- Lechea mucronata* Raf., GW 06b; PM 06  
*Lechea tenuifolia* Michx., LBRH 32058

**Clethraceae**

- Clethra alnifolia* L., SW 20; MM 7119

**Commelinaceae**

- Commelina erecta* L., LBSH 32126  
*Commelina virginica* L., MM 7155; LBSH 32120

**Convolvulaceae**

- Dichondra carolinensis* Michx., MM 7161  
*Ipomoea cordatotriloba* Dennst var. *cordatotriloba*, SEWP 350; LB 33031  
*Ipomoea pandurata* (L.) G. Mey., LB 32493  
*Jacquemontia tamnifolia* (L.) Griseb., SEWPLB 500

**Cornaceae**

- Cornus florida* L., MM 7087  
*Nyssa aquatica* L., SEWP 362  
*Nyssa biflora* Walter, SEWP 397  
*Nyssa sylvatica* Marsh., SEWP 275; MM 7081



**Crassulaceae***Penthorum sedoides* L., LB 32805**Cupressaceae***Juniperus virginiana* L. var. *virginiana*, MM 7076; LB 33032*Taxodium distichum* (L.) L.C. Rich., SW 42**Cucurbitaceae**\**Citrullus lanatus* (Thunb.) Matsum & Nakai LB 33011**Cuscutaceae***Cuscuta compacta* Juss. ex Choisy, MM 7231; LB 33007**Cyperaceae***Carex albicans* Willd. ex Spreng. var. *australis* (L.H. Bailey) Rettig, LB 31936*Carex brevior* (Dewey) Mack. ex Lunell, SW 127*Carex cherokeensis* Schwein., LB 32004*Carex complanata* Torr. & Hook., LB 31953, 31989; MM 7677*Carex corrugata* Fernald, LB 32016*Carex debilis* Michx. var. *debilis*, MM 7231*Carex digitalis* Schkuhr ex Willd. var. *floridana* (L.H. Bailey) Naczi & Bryson, LB 31947, 32007; LBSH 32133; MM 7672*Carex flaccosperma* Dewey, LB 32014, 32015*Carex frankii* Kunth, LB 32175*Carex glaucescens* Elliott, MM 7210; LBJL 32600*Carex intumescens* Rudge, LBRH 32046; MM 7663; SW 129; LB 32065*Carex jooi* L.H. Bailey, SEWP 351*Carex leptalea* Wahlenb. subsp. *harperi* (Fernald) W. Stone, LBSEWP 31889; LB 32023*Carex lurida* Wahlenb., LBSH 32148; LBJL 32618; SW 119+*Carex* section *ovales*, LB 31987*Cyperus croceus* Vahl, LBRH 32067\**Cyperus entrerianus* Boeck., SEWPLB 503*Cyperus erythrorhizos* Muhl., LB 32794*Cyperus haspan* L., SEWP 356; LB 32481*Cyperus odoratus* L., SEWP 400*Cyperus pseudovegetus* Steud., LB 32165*Cyperus virens* Michx., MM 7666*Eleocharis microcarpa* Torr., LBSH 32134a*Eleocharis tuberculosa* (Michx.) Roem. & Schult., LBSEWP 31895; MM 7233; LBRH 32047; MM 7662*Kyllinga odorata* Vahl, LB 32484*Kyllinga pumila* Michx., SEWP 399*Rhynchospora caduca* Elliott, MM 7127; LBSH 32150*Rhynchospora corniculata* (Lam.) A. Gray, SEWP 231+*Rhynchospora debilis* Gale, LBSH 32140; LBRH 32087*Rhynchospora elliottii* A. Dietr., LBSH 32214*Rhynchospora fascicularis* (Michx.) Vahl, LB 32479*Rhynchospora globularis* (Chapm.) Small var. *globularis* LBSH 32132, 32220*Rhynchospora glomerata* (L.) Vahl, SW 98; LB 32472, 33019*Rhynchospora inexpansa* (Michx.) Vahl, MM 7118*Rhynchospora mixta* Britton, MM 7074; LB 33038*Rhynchospora plumosa* Elliott, LB 32022; LBRH 32078; MM 7676; SW 109*Rhynchospora pusilla* Chapm. ex M.A. Curtis, LBSH 3214*Scirpus cyperinus* L., LB 32164*Scleria oligantha* Michx., LB 31995; MM 7671*Scleria triglomerata* Michx., MM 7192; LB 32019; LBJL 32593; SW 120**Cyrillaceae***Cyrilla racemiflora* L., SW 22; MM 7121**Dennstaedtiaceae***Pteridium aquilinum* (L.) Kuhn, SW 96; MM 7133**Dioscoreaceae***Dioscorea villosa* L., GW 2288**Droseraceae***Drosera brevifolia* Pursh, SW 27; MM 7654**Dryopteridaceae***Athyrium filix-femina* (L.) Roth var. *asplenioides* (Michx.) Farw., MM 7153*Onoclea sensibilis* L., MM 7228; LBSH 32127*Polystichum acrostichoides* (Michx.) Schott, LB 31937**Ebenaceae***Diospyros virginiana* L., LB 32482**Ericaceae***Leucothoe racemosa* (L.) A. Gray, SEWP 359*Lyonia ligustrina* (L.) DC., MM 7123*Lyonia mariana* (L.) D. Don, SEWP 416*Monotropa uniflora* L., SW 89; MM 7117; LB 33035*Rhododendron canescens* (Michx.) Sweet, WP 112*Rhododendron viscosum* (L.) Torr., SW 18; MM 7122; LBSH 32129*Vaccinium arboreum* Marshall, PH 005*Vaccinium corymbosum* L., SW 19, 130, 45; LB 31950**Euphorbiaceae***Acalypha gracilens* A. Gray, SW 99; GW 2255*Chamaesyce maculata* (L.) Small, SEWP 247*Chamaesyce nutans* (Lag.) Small, SEWP 251*Croton capitatus* Michx., MM 7200*Croton glandulosus* L. var. *septentrionalis* Muell.-Arg., SEWP 270*Croton monanthogynus* Michx., SEWP 259*Croton willdenowii* G.L. Webster, LB 32490*Euphorbia corollata* L., LB 32807*Euphorbia dentata* Michx., SEWP 254; LB 32460*Phyllanthus caroliniensis* Walter, LB 32475\**Phyllanthus urinaria* L., MM 7111*Sebastiania fruticosa* (W. Bartram) Fernald, SW 14\**Triadica sebifera* (L.) Small, SW 01**Fabaceae**\**Albizia julibrissin* Durazz., MM 7107*Centrosema virginianum* (L.) Benth, LBJH 32604*Cercis canadensis* L. var. *canadensis*, SEWP 271*Chamaecrista fasciculata* (Michx.) Greene, SEWP 276; LBJL 32605*Chamaecrista nictitans* (L.) Moench, LB 32461, 32179, 32486, 32806*Crotalaria sagittalis* L., SW 65; LB 32488*Desmodium ciliare* (Muhl. ex Willd.) DC., SEWPLB 497*Desmodium glabellum* (Michx.) DC., GW 2337*Desmodium paniculatum* DC., MM 7189*Erythrina herbacea* L., SEWP 4121*Galactia volubilis* (L.) Britton, LB 32489*Glottidium vesicarium* (Jacq.) Harper, SEWP 43\**Kummerowia striata* (Thumb.) Schindler, LBSH 32128



- \**Lespedeza cuneata* (Dum-Cours.) Harper, SEWP 348  
*Lespedeza virginica* (L.) Britton, LB 32808  
 \**Medicago lupulina* L., LB 31941  
*Mimosa hystricina* (Small ex Britton & Rose) B.L. Turner, LBSH 32119  
*Rhynchosia latifolia* Nutt., LBRH 32050  
*Strophostyles umbellata* (Muhl. ex Willd.) Britton, SEWP 347; LBSH 32118; LB 32809  
*Stylosanthes biflora* (L.) Britton, Sterns, & Poggenb., SEWP 235  
 \**Trifolium campestre* Schreb., MM 7151; LBSH 32152  
 \**Trifolium incarnatum* L., SW 124  
 \**Trifolium lappaceum* L., LB 32172  
*Wisteria frutescens* (L.) Poir., LB 31999  
 \**Wisteria sinensis* (Sims) Sweet, SW 131  
 \**Vicia sativa* L. subsp. *nigra* (L.) Ehrhart, LB 32002; MM 7665

### Fagaceae

- Castanea pumila* (L.) Mill., SEWP 408; LB 33021  
*Fagus grandifolia* Ehrh., SW 09; MM 7075  
*Quercus alba* L., SW 06; MM 7077  
*Quercus falcata* Michx., SW 52; MM 7108  
*Quercus hemisphaerica* Bartr. ex Willd., SW 54, 55; LB 33028; MM 7089  
*Quercus laurifolia* Michx., SEWP 344  
*Quercus margaretta* Ashe ex Small, SEWP 424  
*Quercus michauxii* Nutt., MM 7229; SW 44a  
*Quercus nigra* L., MM 7085  
*Quercus phellos* L., SEWPLB 484  
*Quercus velutina* Lam., LBRH 32084

### Gentianaceae

- +*Bartonia texana* Correll, SEWP 340; LB 33010  
 \**Centaurium pulchellum* (Sw.) Druce, SW 108  
*Sabatia campestris* Nutt., LB 32169

### Geraniaceae

- Geranium carolinianum* L., WP 118

### Grossulariaceae

- Itea virginica* L., SEWP 403a; LB 32024, 32784; MM 7660

### Haloragaceae

- Proserpinaca palustris* L., SEWPLB 489

### Hammamelidaceae

- Hamamelis vernalis* Sarg., MM 7054  
*Hamamelis virginiana* L., MM 7217; GW 2289  
*Liquidambar styraciflua* L., MM 7053

### Hypericaceae

- Hypericum drummondii* (Grev. & Hook.) Torr. & A. Gray, GW 2259; LBJL 32617  
*Hypericum galioides* Lam., MM 7207; GW 2257  
*Hypericum gentianoides* (L.) Britton, Sterns, & Poggenb., LB-SEWP 31896; SW 95  
*Hypericum hypericoides* (L.) Crantz, SW 73; MM 7220; LBRH 32063; LBJL 32599  
*Hypericum mutilum* L., SW 66, 25  
*Triadenum walteri* (J.G. Gmel.) Gleason, SW 35, 85

### Iridaceae

- Sisyrinchium campestre* E.P. Bicknell, SEWP 543  
*Sisyrinchium sagittiferum* E.P. Bicknell, LB 31952  
*Sisyrinchium rosulatum* E.P. Bicknell, LB 32011; MM 7684, 7680; SW 114

### Juglandaceae

- Carya aquatica* (Michx. f.) Nutt., SEWPLB 495  
*Carya texana* Buckley, SEWP 412  
*Carya tomentosa* (Lam. ex Poir.) Nutt., SW 28

### Juncaceae

- Juncus acuminatus* Michx., LB 32005; LBRH 32069; LBSH 32142a  
*Juncus antheratus* (Wiegand) R.L. Brooks, LB 31997  
*Juncus coriaceous* Mack., SW 40  
*Juncus diffusissimus* Buckley, LBRH 32070, 32077; LBSH 32123; LB 32473  
*Juncus effusus* L., LB 31938  
*Juncus marginatus* Rostk, MM 7130; LBRH 32049  
*Juncus repens* Michx., SEWP 355  
*Juncus scirpoides* Lam., LB 32799  
*Juncus tenuis* Willd., LB 32020  
*Juncus validus* Coville, MM 7167; LBRH 32088  
*Luzula bulbosa* (A.W. Wood) Smyth, LB 31935

### Lamiaceae

- Hyptis alata* (Raf.) Shinnars, SEWP 404  
*Lycopus rubellus* Moench, SEWP 398  
*Lycopus virginicus* L., MM 7227; SW 80; LB 32797  
*Monarda citriodora* Cerv. ex Lag., MM 7203  
*Monarda punctata* L. var. *punctata*, LB 32492  
 \**Perilla frutescens* (L.) Britton, SEWP 267  
*Prunella vulgaris* L., MM 7160  
*Pycnanthemum albescens* Torr. & A. Gray, SEWPLB 499  
*Pycnanthemum tenuifolium* Schrad., LB 32176  
*Salvia lyrata* L., MM 7096  
*Scutellaria elliptica* Muhl. ex Spreng., SEWP 239; LB 32013  
*Scutellaria integrifolia* L., LBRH 32043  
*Stachys crenata* Raf., LB 32008  
*Teucrium cubense* Jacq., SW 69; MM 7157  
*Trichostema dichotomum* L., SW 77; LB 33020

### Lauraceae

- Persea borbonia* (L.) Spreng., SW 08, MM 7088  
*Persea palustris* (Raf.) Sarg., SEWPLB 480; LB 32785  
*Sassafras albidum* (Nutt.) Nees, SEWP 241

### Liliaceae

- Hypoxis curtissii* Rose, SW 39, 97, 82; LBJL 32594  
*Lilium michauxii* Poir., LBSH 32136  
*Nothoscordum bivalve* (L.) Britton, MM 7216; LB 33022

### Linaceae

- Linum medium* (Planch.) Britton var. *texanum* (Planch.) Fernald, MM 7142  
*Linum striatum* Walter, MM 7174; LBSH 32146

### Loganiaceae

- Gelsemium sempervirens* (L.) Aiton f., SW 07; MM 7067; LB 33008  
*Mitreola petiolata* (J.F. Gmel.) Torr. & A. Gray, SW 75; LB 32802

### Lygodiaceae

- \**Lygodium japonicum* (Thunb. ex Murray) Sw., SW 87; MM 7072

### Lythraceae

- \**Cuphea carthagenensis* (Jacq.) J.F. Macbr., SW 30; WRC 11400



\**Cuphea glutinosa* Cham. & Schlecht., LB 3246  
*Rotala ramosior* (L.) Koehne, LB 32789

### Magnoliaceae

*Magnolia grandiflora* L., MM 7061  
*Magnolia virginiana* L., SW 15

### Malvaceae

*Sida rhombifolia* L., MM 7171

### Melastomataceae

*Rhexia mariana* L., MM 7149

### Meliaceae

\**Melia azedarach* L., SEWPLB 504

### Moraceae

*Maclura pomifera* (Raf.) C.K. Schneid., GW 2296  
*Morus rubra* L., SEWP 266; MM 7134

### Myricaceae

*Morella caroliniensis* (Mill.) Small, SW 21; MM 7090; LBSH 32121  
*Morella cerifera* (L.) Small, LB 32790

### Oleaceae

*Chionanthus virginicus* L., SEWP 409  
*Fraxinus americana* L., MM 7213, 7063; GW 2252; SW 113  
*Fraxinus caroliniana* Mill., SEWP 361; LB 32786  
*Fraxinus pennsylvanica* Marsh., LB 32795  
 \**Ligustrum sinense* Lour., MM 7146

### Onagraceae

*Ludwigia alternifolia* L., SEWP 261, 236; LB 32168  
*Ludwigia decurrens* Walter, GW 2333; LB 32801  
*Ludwigia glandulosa* Walter, SEWP 401  
*Ludwigia leptocarpa* (Nutt.) Hara, SEWP 358  
*Ludwigia pilosa* Walter, SEWP 406; LB 32796, 33017  
*Ludwigia palustris* (L.) Elliott, LB 31993  
*Oenothera biennis* L., SEWP 392  
*Oenothera laciniata* Torr. & A. Gray, LBRH 32052; SW 106  
*Oenothera linifolia* Nutt., LBRH 32056

### Ophioglossaceae

*Botrychium biternatum* (Sav.) Underwood, SW 78

### Orchidaceae

*Spiranthes praecox* (Walter) S. Watson., SW 41; LBRH 32066, 32081  
*Spiranthes vernalis* Engelm. & A. Gray, SW 121  
*Tipularia discolor* (Pursh) Nutt., MM 7219, 7091; LBJL 32598

### Orobanchaceae

*Epifagus virginiana* (L.) W. Bart., SW 90

### Osmundaceae

*Osmunda cinnamomea* L., SW 23  
*Osmunda regalis* L. var. *spectabilis* (Willd.) A. Gray, SW 13

### Oxalidaceae

*Oxalis corniculata* L. var. *wrightii* (A. Gray) Turner, MM 7095; LB 31951; SW 117  
 \**Oxalis debilis* Kunth var. *corymbosa* (DC.) Lourteig, MM 7664

### Passifloraceae

*Passiflora lutea* L., MM 7060

### Phytolaccaceae

*Phytolacca americana* L., MM 7110

### Pinaceae

*Pinus echinata* Mill., SEWP 437  
*Pinus taeda* L., MM 7093

### Plantaginaceae

*Plantago virginica* L., MM 7094; LBRH 32079

### Platanaceae

*Platanus occidentalis* L., SEWP 363

### Poaceae

*Agrostis hyemalis* (Walter) Britton, Sterns & Poggenb., LBRH 32085; MM 7675  
 \**Aira caryophylla* L. var. *capillaris* Mutel, LBRH 32054  
*Andropogon glomeratus* (Walter) Britton, Sterns, & Poggenb., MM 7196  
*Andropogon virginicus* L., SW 101  
*Aristida purpurascens* Poir. var. *purpurascens*, MM 7191; LB 33037, 33041  
*Arundinaria gigantea* (Walter) Muhl., MM 7172  
*Axonopus fissifolius* (Raddi) Kuhl., LBRH 32076  
 \**Bothriochloa ischaemum* (L.) Keng var. *songarica* (Fish. & Mey) Celarier & Harlan, LB 33018  
 \**Briza minor* L., SW 62; MM 7152  
 \**Bromus catharticus* Vahl, LBRH 32072; MM 7658  
*Chasmanthium laxum* (L.) H.O. Yates, MM 7104  
*Chasmanthium sessiliflorum* (Poir.) H.O. Yates, SEWPLB 498  
 \**Cynodon dactylon* (L.) Pers., SEWP 246  
*Dichanthelium aciculare* (Desv. ex Poir.) Gould & C.A. Clark var. *aciculare*, LB 32459, 33000  
*Dichanthelium acuminatum* (Sw.) Gould & C.A. Clark var. *acuminatum*, LBRH 32089; LBSH 32142  
*Dichanthelium boscii* (L.) Gould & C.A. Clark, MM 7165; LB 31990, 32180  
*Dichanthelium commutatum* (Schult.) Gould subsp. *commutatum* LBSEWP 31891; LB 31949  
*Dichanthelium dichotomum* (L.) Gould subsp. *dichotomum*, SEWP 332; MM 7137, 7071; LBSH 32134  
*Dichanthelium dichotomum* (L.) Gould subsp. *microcarpon* (Muhl. ex Elliott) Freckman & Lelong, LBRH 32083; LB 32171  
*Dichanthelium dichotomum* (L.) Gould subsp. *roanokense* (Ashe) Freckman & Lelong, LBSH 32131  
*Dichanthelium laxiflorum* (Lam.) Gould, LBSEWP 31890  
*Dichanthelium oligosanthes* (Schult.) Gould var. *oligosanthes*, LB 32018, 32471; LBRH 32064  
*Dichanthelium polyanthes* (Schult.) Mohlenbr., MM 7136  
*Dichanthelium scabriusculum* (Elliott) Gould & C.A. Clark, LBRH 32086  
*Dichanthelium scoparium* (Lam.) Gould, MM 7218; LB 33005  
*Dichanthelium tenue* (Muhl.) Freckmann & Lelong, LBRH 32044; LBSH 32138, 32123a, 32121a  
*Digitaria ciliaris* (Retz.) Koel., GW 2330; LB 32476, 32458  
 \**Digitaria ischaemum* (Schreb.) Muhl., MM 7232  
 \**Eleusine indica* (L.) Gaertn., SEWP 248  
*Elymus virginicus* L., LB 32177  
*Eragrostis hirsuta* (Michx.) Nees, LB 33040  
*Eragrostis refracta* (Muhl.) Scribn., MM 7230  
*Eragrostis spectabilis* (Pursh) Steud., LB 33025



*Hordeum pusillum* Nutt., LB 32010  
*Leersia virginica* Willd., LBSEWP 31892; MM 7195  
 \**Lolium perenne* L., LBRH 32073  
*Melica mutica* Walter, MM 7168  
*Oplismenus hirtellus* (L.) P. Beauv. subsp. *setarius* (Lam.) Mez ex Ekman, SEWPLB 483  
*Panicum anceps* Michx., LB 32485  
*Panicum brachyanthum* Steud., MM 7201  
*Panicum rigidulum* Bosc ex Nees, SEWP 396  
*Panicum verrucosum* Muhl., MM 7193; WRC11402; LB 33006  
 \**Paspalum dilatatum* Poir., LB 32463  
*Paspalum langei* (E. Fourn.) Nash, SEWPLB 494  
 \**Paspalum notatum* Fluegge, MM 7158  
*Paspalum plicatulum* Michx., SW 64; MM 7190  
*Paspalum setaceum* Michx., LB 32478  
 \**Paspalum urvillei* Steud., MM 7202; SW 70; GW 2328  
*Phalaris caroliniana* Walter, LBSH 32144  
*Piptochaetium avenaceum* (L.) Parodi, LB 31992  
 \**Poa annua* L., WP 117  
 \**Sacciolepis indica* (L.) Chase, LBSEWP 31897; SW 04; WRC 11401  
 \**Schedonorus arundinaceus* (Schreb.) Dumort., LB 32003  
*Schizachyrium scoparium* (Michx.) Nash, LB 32803  
*Sphenopholis intermedia* (Rydb.) Rydb., LB 31985; MM 7656  
*Sphenopholis obtusata* (Michx.) Scribn., LBSH 32145  
*Sporobolus indicus* (L.) R. Br., SW 102; GW 2329  
*Tridens flavus* (L.) Hitchc. var. *flavus*, SW 103  
*Vulpia octoflora* (Walter) Rydb., LBRH 32057

#### **Polygalaceae**

*Polygala mariana* Mill., LBJL 32615  
*Polygala polygama* L., LBRH 32045

#### **Polygonaceae**

*Brunnichia ovata* (Walter) Shinnars, SEWP 402a  
*Polygonum punctatum* Elliott., SEWPLB 485  
*Rumex hastatulus* Baldw., LBRH 32055

#### **Polypodiaceae**

*Pleopeltis polypodioides* Andrews & Windham subsp. *michauxiana* (Weatherby) Andrews & Windham, GW 53; MM 7105; SEWP 402b; SW 81

#### **Primulaceae**

\**Anagallis arvensis* L., MM 7657  
*Samolus valerandi* L. subsp. *parviflorus* (Raf.) Hulten, LBSEWP 31888

#### **Rhamnaceae**

*Berchemia scandens* (Hill) K. Koch, MM 7057  
*Frangula caroliniana* (Walter) A. Gray, MM 7082; LB 33026

#### **Rosaceae**

*Crataegus marshallii* Egglest., MM 7156  
*Crataegus opaca* Hook. & Arn. ex Hook., LBSH 32135  
*Crataegus spathulata* Michx., MM 7166, 7064  
 \**Duchesnea indica* (Andr.) Focke, MM 7215  
*Prunus caroliniana* (Mill.) Aiton, MM 7068  
*Prunus serotina* Ehrh., SEWP 426  
*Rubus argutus* Link, SEWPLB 482  
*Rubus trivialis* Michx., MM 7144

#### **Rubiaceae**

*Cephalanthus occidentalis* L., MM 7154  
*Diodia teres* Walter, SEWP 234  
*Diodia virginiana* L., SEWP 237  
*Galium pilosum* Aiton, SEWPLB 492  
*Houstonia pusilla* Schoepf., LB 31933  
*Mitchella repens* L., MM 7066  
*Oldenlandia boscii* (DC.) Chapm., SEWP 364; GW 2256; LB 31945  
*Oldenlandia uniflora* L., SEWPLB 486; LB 32810, 32999  
 \**Richardia scabra* L., SEWP 394; MM 7682, SW 107  
 \**Sherardia arvensis* L., WP 114  
*Stenaria nigricans* (Lam.) Terrell, SEWP 233

#### **Saururaceae**

*Saururus cernuus* L., MM 7132

#### **Scrophulariaceae**

*Bacopa monnieri* (L.) Pennell, SEWP 243; MM 7681; SW 112  
*Gratiola pilosa* Michx., LB 32021  
*Gratiola virginiana* L., LB 31938  
 \**Lindernia crustacea* (L.) F. Muell., LB 33014  
*Lindernia dubia* (L.) Penn., LB 32788  
*Mecardonia acuminata* (Walter) Small, SW 76; MM 7223; PM 01; LB 32788  
*Micranthemum umbrosum* (J.G. Gmel.) Blake, SEWP 352; MM 7667  
*Mimulus alatus* Aiton, LB 32787  
*Nuttallanthus texana* (Scheele) Sutton, LB 31944; LBRH 32062  
*Scoparia dulcis* L., MM 7221; SW 79; GW 3360a, 2254  
 \**Veronica arvensis* L., LB 31940

#### **Smilacaceae**

*Smilax bona-nox* L., SEWP 268  
*Smilax glauca* Walter, MM 7145  
*Smilax laurifolia* L., SEWP 417; SW 24  
*Smilax pumila* Walter, MM 7115, 7070  
*Smilax rotundifolia* L., SEWP 274  
*Smilax smallii* Morong, MM 7086

#### **Solanaceae**

*Solanum carolinense* L., MM 7173; LBRH 32068

#### **Symplocaceae**

*Symplocos tinctoria* (L.) L. Her., MM 7116, 7113

#### **Styracaceae**

*Halesia diptera* Ellis, SEWPLB 505  
*Styrax americanus* Lam., SW 04

#### **Thelypteridaceae**

*Thelypteris kunthii* (Desv.) C.V. Morton, LB 32480

#### **Ulmaceae**

*Celtis laevigata* Willd., GW 2335  
*Ulmus alata* Michx., SW 56; GW 2334  
*Ulmus americana* L., SEWPLB 493

#### **Urticaceae**

*Boehmeria cylindrica* (L.) Sw., MM 7208; SW 37; LB 3021

#### **Valerianaceae**

*Valerianella radiata* (L.) Dufr., WP 115



*Valerianella radiata* (L.) Dufr. f. *parviflora* (Dyal) Egg. Ware,  
LBRH 32053

#### Verbenaceae

*Callicarpa americana* L., MM 7084

\**Glandularia pulchella* (Sweet) Troncoso, SEWP 256

*Phyla nodiflora* (L.) Greene, SW 94

\**Verbena brasiliensis* Vell., SEWP 258

*Verbena halei* Small, MM 7143

\**Verbena rigida* Spreng., SEWP 257

#### Violaceae

*Viola lanceolata* L., MM 7092; LB 33013

*Viola palmata* L., MM 7159; GW 2295; PM 05

*Viola primulifolia* L., SW 11

*Viola sagittata* Aiton, GW 2292

*Viola sororia* Willd., GW 2294; LB 31986

#### Vitaceae

*Ampelopsis arborea* (L.) Koehne, SW 29

*Parthenocissus quinquefolia* (L.) Planch., SEWP 250

*Vitis aestivalis* Michx., MM 7079; GW 2428

*Vitis rotundifolia* Michx., MM 7055

#### Xyridaceae

*Xyris difformis* Chapm. var. *difformis*, LBSEWP 31893, 31898;  
MM 7204, 7237

+*Xyris jupicai* L.C. Rich., SEWP 419, 354, 328; LB 32462

### ADDENDUM

*Isotria verticillata* (whorled pogonia) and sugar maple (probably either *Acer barbatum* or *Acer leucoderme*) are listed for the unit on the Beechwoods Trail Guide, a mimeographed guide available at the trail entrance, but we failed to collect them during our two-year field survey, and could not find herbarium material of same. Geraldine Watson (2006) also indicated that sugar maple (*Acer barbatum*) is making a remarkable recovery in this unit with the removal of cattle grazing.

### NOTES

**Carex section ovales.** The specimen in this collection was too immature for specific identification. The only other *Carex* in section *ovales* was *C. brevior*. Perhaps this was an immature *C. brevior*.

**Bartonia texana.** Currently Beech Creek is the only Big Thicket unit to have this rare Texas endemic. We made two collections, one in a sphagnum mat along the Beechwoods Trail, and one far from any trail, near the intersection of Beech Creek with Little Beech Creek.

**Bradburia pilosa.** We are following Semple (2006). An equally correct name is *Chrysopsis pilosa* Nutt.

**Rhynchospora debilis.** This is the third collection for Texas and the first for the Pineywoods. See Brown et al. (2007) for additional information.

**Xyris jupicai.** There is no consensus as to the native or introduced status of this yellow-eyed-grass.

### DISCUSSION

There are 103 families and 229 genera represented for the 470 taxa (418 native) on the Beech Creek Unit list. Eight families: Poaceae (59 taxa), Asteraceae (53 taxa), Cyperaceae (40 taxa), Fabaceae (26 taxa), Lamiaceae (15 taxa), Euphorbiaceae (13 taxa), Scrophulariaceae (11 taxa), and Juncaceae (11 taxa) account for 48.9% of the taxa collected. The largest genera are: *Carex* (15 taxa), *Dichanthelium* (13 taxa), *Rhynchospora* (11 taxa), *Juncus* (10 taxa), *Quercus* (9 taxa), and *Cyperus* (7 taxa).

While it is the case that our list is incomplete, as are all floras, and that a few taxa reported here may no longer exist on the unit, specimens of most taxa that have grown in the Beech Creek Unit during the past quarter century have been collected (probably 95+ %). We estimate that the Beech Creek Unit has about 425 to 450 native species/taxa.

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to near the confluence with Beech Creek. Eleven new additions to the species list were collected on this all-day hike. Thanks also to Ray C. Telfair II and Eric Keith for many helpful suggestions derived from their careful reading of the paper.

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